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FOR INTERNAL KEYSTONE PROJECT USE ONLY

TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting ENSR
Date/Time of Meeting March 5, 2007
Keystone Team Member(s) Sara Stribley

Contact Information:

Name	John Schumacher
Title	
Organization	North Dakota Game and Fish Department
Address	100 North Bismarck Expressway Bismarck, ND 58501-5095
County	
Phone	701-328-6347
E-mail address	

Meeting Information:

Type of Contact (phone, in-person, etc.): Phone

Issue: Stream, wetlands, and Sensitive Species Best Management Practices

Concern Level: High Moderate Low

Description:

I spoke with John regarding any additional BMPs that the North Dakota Game and Fish Department could provide ENSR in addition to the recommendations in their consultation letter dated May 4, 2006. I briefly reviewed what BMPs were recommended in the letter, and inquired about any additional stream, wetland, native prairie, or biological BMPs. John stated that they recommended directionally drilling the larger waterbody crossings. If that cannot be done, then construction should be avoided during the spawning season (April 15 through June 1). Sedimentation should be limited as much as possible. He strongly recommended avoiding any native prairie crossings. If avoidance is not possible, then construction should be necked down, and the area should be replanted with matching vegetation.

Issue: _____

Concern Level: High Moderate Low

Description:

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TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting ENSR

Date/Time of Meeting February 12, 2007

Keystone Team Member(s) Sara Stribley

Contact Information:

Name	John Schumacher
Title	
Organization	North Dakota Game and Fish Department
Address	100 North Bismarck Expressway Bismarck, ND 58501-5095
County	
Phone	701-328-6347
E-mail address	

Meeting Information:

Type of Contact (phone, in-person, etc.): Phone

Issue: 2007 Biological Survey Proposal Follow-up

Concern Level: High Moderate Low

Description:

John Schumacher returned the call I had made to Steve Dyke on Friday. I briefly reviewed our survey proposals for 2007 and explained that ENSR wanted to make sure the NDGFD did not have any concerns over T&E species. John informed me that the survey proposals and schedule looked good, and that the NDGFD would be sending the concurrence form to ENSR in the next few days. I also asked John if North Dakota had any collection permits, action permits, or any other specific permit that Keystone would need to fill out if T&E species were discovered within the ROW. John stated that there are no permits for T&E species, but that the NDGFD would default to the FWS regarding T&E issues.

Issue: _____

Concern Level: High Moderate Low

Description:

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TransCanada – Keystone Pipeline Contact Summary Form

Location of Meeting ENSR

Date/Time of Meeting February 9, 2007

Keystone Team Member(s) Sara Stribley

Contact Information:

Name	Michael McKenna
Title	Conservation Supervisor
Organization	North Dakota Game and Fish Department
Address	100 North Bismarck Expressway Bismarck, ND 58501-5095
County	
Phone	701-328-6347
E-mail address	

Meeting Information:

Type of Contact (phone, in-person, etc.): Phone

Issue: 2007 Biological Survey Proposal Follow-up

Concern Level: High___Moderate___Low_____

Description:

I called Michael McKenna to follow-up with the 2007 biological survey package that I sent to him in early January, and to check on any required permits that Keystone may need if T&E species are found during the surveys. Michael stated that I needed to talk to Steve Dyke regarding this information. Steve's number is 701-328-6247. I immediately called Steve and left a message for him.

Issue: _____

Concern Level: High___Moderate___Low___

Description:

ENSR

1601 Prospect Parkway, Fort Collins, Colorado 80525
T 970.493.8878 F 970.493.0213 www.ensr.aecom.com

January 17, 2007

Michael McKenna
North Dakota Game and Fish Department
100 North Bismarck Expressway
Bismarck, ND 58501-5095

Dear Mr. McKenna:

At this time, ENSR Corporation (ENSR) is providing you with information regarding the implementation of the 2007 biological survey program for the Keystone Mainline Pipeline Project in North Dakota, and requesting your feedback and concurrence on certain proposed actions.

Project Description

TransCanada is planning to construct and operate an approximately 1,845-mile-long interstate crude oil transmission system from an oil supply hub near Hardisty, Alberta, Canada to destinations in the Midwestern United States (U.S). The proposed Project would consist of approximately 1,078 miles of new pipeline constructed from the U.S.-Canada border in Cavalier County, North Dakota, to terminals and refineries in Wood River (Madison County) and Patoka (Marion County), Illinois. This pipeline is referred to as the Keystone Mainline. Approximately 283 miles of the Keystone Mainline would parallel the proposed Rockies Express Pipeline - West (REX-West) Project in Kansas and Missouri. In addition, TransCanada proposes to construct a 292-mile pipeline extension (Cushing Extension) that would extend from the Keystone Mainline south from the Nebraska/Kansas border to Cushing, Oklahoma. TransCanada proposes to begin construction of the Keystone Mainline in early 2008, with the system in-service by the end of 2009. Work on the Cushing Extension will begin in late 2009 or early 2010, with a Cushing Extension in-service date of 2010. The project also will require the construction of pump stations, valves, meters, and other ancillary facilities. The hydraulic characteristics of the pipeline will determine pump station and valve locations. Electrical powerlines and facility upgrades will be required in some locations to provide power for the new pump stations, though these facilities will be constructed by local utility companies, not Keystone.

Biological Survey Program

In 2006, biological surveys were initiated for several species potentially located along the Keystone Mainline Project route in North Dakota. ENSR sent these 2006 biological survey reports to the U.S. Fish and Wildlife Service (USFWS) in December, for their review and evaluation. Additional surveys are planned throughout 2007 for the species surveyed in 2006, and for the majority of remaining sensitive species that may be located within the Keystone Mainline Project vicinity (see attached survey schedule). Sensitive species and survey locations have been determined through consultation with the North Dakota Game and Fish Department, the North Dakota Natural Heritage Program, and the USFWS. Some survey areas have been refined based on information obtained through habitat surveys conducted in 2006. To facilitate your review of the 2007 Keystone Mainline biological survey program, ENSR is providing you with the following materials, and asking for your signed concurrence on several proposed actions:

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Michael McKenna
January 17, 2007
Page 2

- Proposed Threatened and Endangered Species Survey Schedule (2006-2007) – This document is provided to give an overview of when and where species specific surveys have been, and will be conducted in North Dakota. Please sign and return the survey schedule concurrence form as “concur” or “do not concur.” Please also provide specific comments in the area provided if you “do not concur,” in order for ENSR to promptly address concerns.
- Biological Survey March-Charts (2007) – These charts are provided as a visual tool to guide your assessment of the proposed Threatened and Endangered species surveys. The y-axis provides information on approximate survey windows. This axis shows the general timeframe in which ENSR proposes to complete the surveys for a specific species (based on nesting, spawning, flowering periods, etc.) The x-axis provides information on the Mainline milepost marker where appropriate habitat has been determined to exist for a species. This axis shows where ENSR proposes to complete species specific surveys.
- Survey Protocols – These documents provide detailed information on how specific surveys will be conducted for Threatened and Endangered species. Wherever possible, survey protocols were produced directly from state or federal agency feedback. Please sign and return the survey protocol concurrence form as “concur” or “do not concur.” Please also provide specific comments in the area provided if you “do not concur,” in order for ENSR to promptly address concerns.
- 1:100k U.S. Geological Survey (USGS) Topographic Maps of the Keystone Mainline in North Dakota – Provided for geographic reference to the Project.

Additional copies of these materials are enclosed for distribution to other state wildlife representatives. Copies of these reports also have been sent to John Cochran (Nebraska USFWS – Project Lead). ENSR will be following up with you in early February to discuss the information contained in this package. If you have any questions regarding the enclosed materials, please contact me at (970) 493-8878 ext. 181 or email cjohnson@ensr.aecom.com.

Sincerely,



Charles Johnson
Senior Wildlife Biologist

CJ/ss

Ref: 10623-004

Enc: Proposed Threatened and Endangered Species Survey Schedule
Biological Survey March-Charts
Survey Protocols
1:100k USGS Topographic Maps

**Keystone Pipeline Project
Survey Protocol Concurrence Form**

<input type="checkbox"/> CONCUR	Signature:
	Name:
<input type="checkbox"/> DO NOT CONCUR	Title:
	Date:

If you checked "DO NOT CONCUR," please provide reasons and specific directions in the space provided below on how survey protocols should be changed to meet your acceptance:

**Keystone Pipeline Project
Proposed Survey Schedule for North Dakota
2006 - 2007**

Completed 2006 Surveys					
Species & Status	Survey Dates	Specific Survey Areas (by County & MP)	Survey Description	Surveyor(s)	Comments
Raptors	April 26-May 2, 2006	MP: 34-217 (Pembina, Walsh, Nelson, Steele, Barnes, Ransom, Sargent counties)	An aerial survey was conducted to identify raptor nest sites and breeding territories within at least 0.25 miles of the proposed ROW.	Karen Caddis, Charles Johnson – ENSR Senior Wildlife Biologists	
Native Prairie Habitat Surveys (Dakota Skipper & Western Prairie Fringed Orchid)	September 12-16, 2006	Sargent: 200.0-206.7 Dickey: 206.8 – 215.0	Habitat evaluations were conducted within the ROW to determine potential native prairie habitat for the Dakota Skipper and Western Prairie Fringed Orchid.	Don Hazlet, Ph.D. - ENSR Botanist	

Proposed 2007 Surveys					
Species & Status	Approximate Survey Window	Specific Survey Areas (by County & MP)	Survey Description	Surveyor(s)	Comments
Bald eagle <i>Haliaeetus</i> <i>leucocephalus</i> FT; ND-SC	March-April	Pembina: 7.1, 18.2 (Pembina River, Tongue River) Ransom: 168.5 (Sheyenne River) Walsh: 41.5, 46.2, 54.4 (S. Branch Forest River, N. Branch Forest River, M. Branch Forest River)	Aerial survey to locate nests along major river crossings in ROW. Survey will be conducted 1-mile from the construction ROW.	Mike Phelan, Karen Caddis – ENSR wildlife biologists	See attached survey protocol. 2008 pre-construction surveys will not be required if construction occurs outside of the breeding/ winter roost seasons for this species.
Raptors	March-April	MP: 0-217 (Cavalier, Pembina, Walsh, Nelson, Steele, Barnes, Ransom, Sargent, Dickey counties)	Aerial survey to locate active and inactive nest sites and breeding territories within at least 0.25 miles of the proposed ROW.	Mike Phelan – ENSR wildlife biologist	See attached survey protocol. 2008 pre-construction surveys will not be required if construction occurs outside of

Keystone Pipeline Project
Proposed Survey Schedule for North Dakota
2006 - 2007

Proposed 2007 Surveys					
Species & Status	Approximate Survey Window	Specific Survey Areas (by County & MP)	Survey Description	Surveyor(s)	Comments
Dakota Skipper <i>Herperia dacotae</i> FC; ND-SC	Emergence: Mid-June to Aug-1 st Peak survey period: 1 st week of July	Barnes: 124.9-125.0, 133.3-133.8 Ransom: 167.8-168.6, 172.5-172.6 Sargent: 203.6-203.9, 204.1-205.0 Dickey: 0	One survey will be conducted during the appropriate survey period to determine presence within the ROW.	Qualified ENSR biologist and/or contractor.	the breeding season. See attached survey protocol. 2008 pre-construction surveys would only be required in areas where this species was observed in 2007.
Western Fringed Orchid <i>Platanthera praecilara</i> FT; ND-SC	Flowering period: 15-June to 15-July.	Cavaller: 4.7-4.9 Pemblina: 6.8-7.1, 25.6-25.8, 32.2-32.5 Walsh: 36.2-36.3, 40.2-40.3, 42.4-43.4, 43.4-43.9, 44.2-44.6, 53.2-53.5 Nelson: 73.3-74.4, 74.6-74.8, 74.9-75.0, 75.3-75.5, 76.3-76.7, 77.0-77.5, 79.1-79.6, 80.2-80.6, 80.7-80.8, 80.8-82.7 Steele: 0 Barnes: 124.9-125.0, 133.3-133.8 Ransom: 167.8-168.6, 172.5-172.6 Sargent: 0 Dickey: 207.8-208.3, 210.8-211.9, 212.9-214.0	One survey will be conducted during the flowering period to determine presence within the construction ROW.	Qualified ENSR biologist and/or contractor.	See attached survey protocol. 2008 pre-construction surveys would only be required in areas where this species was observed in 2007.

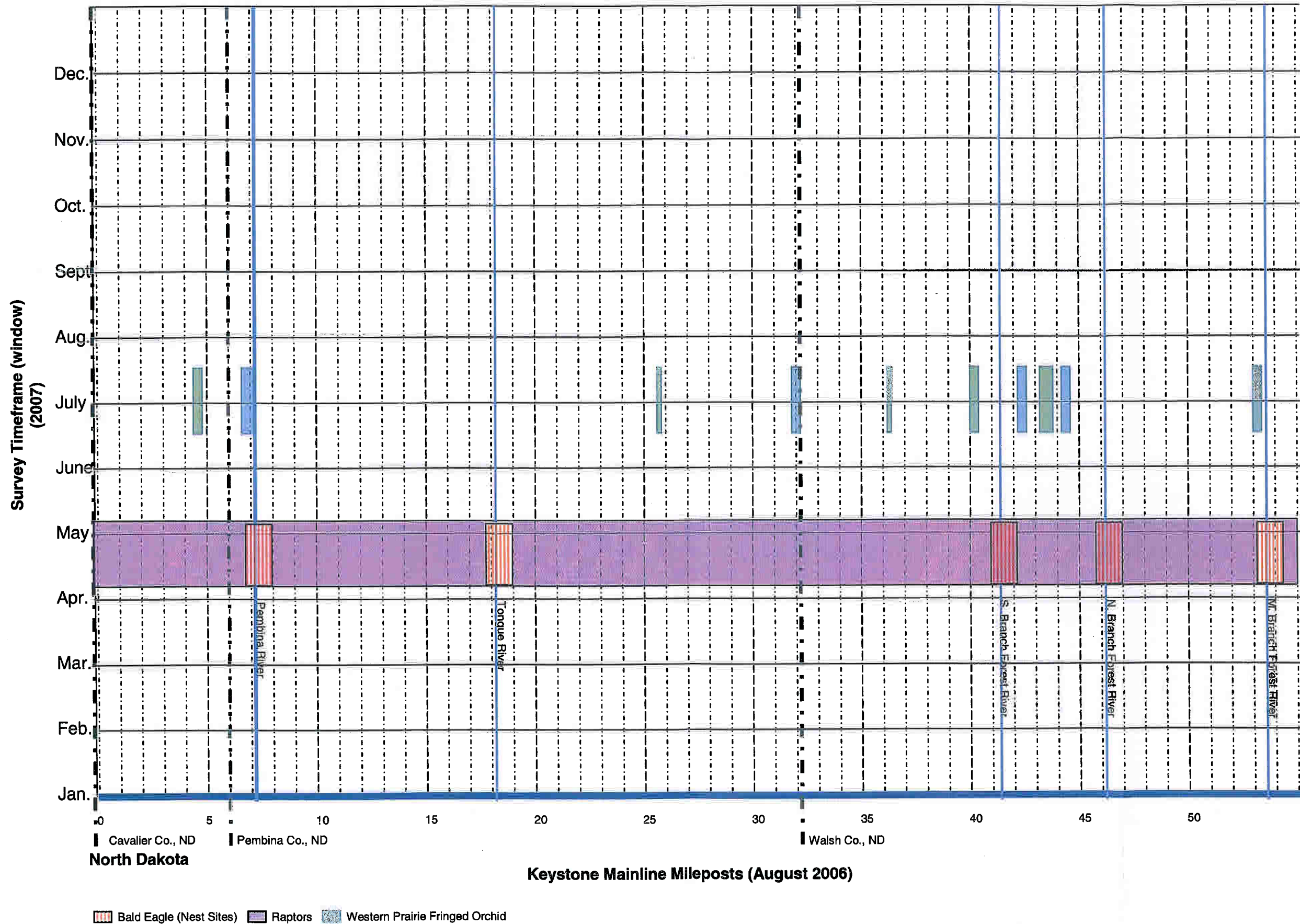
**Keystone Pipeline Project
Proposed Survey Schedule for North Dakota
2006 - 2007**

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**Keystone Pipeline Project
Proposed Survey Schedule for North Dakota
2006-2007**

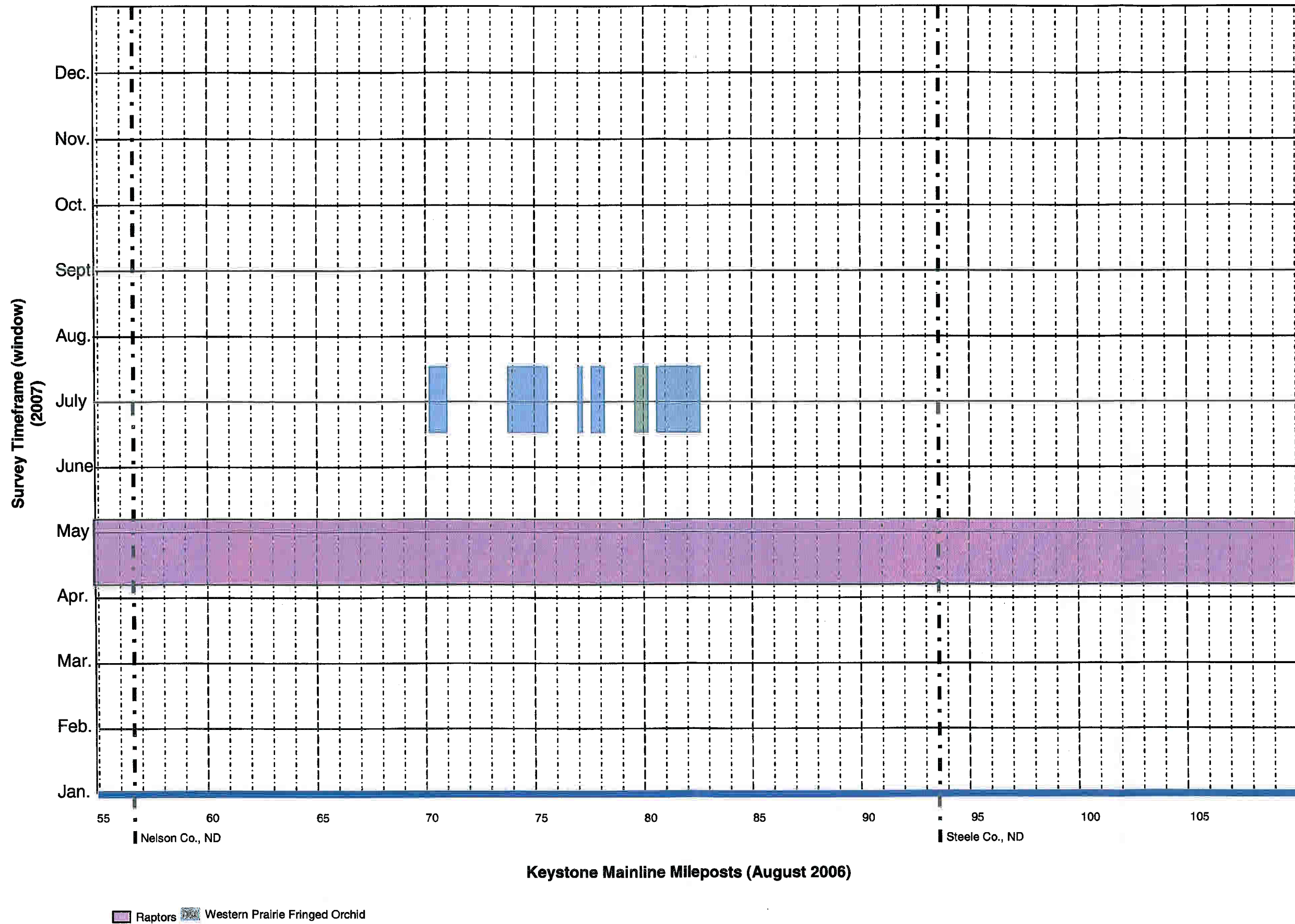
ID	Task Name	Qtr 2, 2006			Qtr 3, 2006			Qtr 4, 2006			Qtr 1, 2007			Qtr 2, 2007			Qtr 3, 2007			
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	Completed Raptor Surveys		4/26 5/2																	
			Completed Raptor Surveys																	
2	Completed Native Prairie Habitat Surveys							9/11 9/16												
								Completed Native Prairie Habitat Surveys												
3	Bald Eagle Nest Surveys												3/15						5/1	
													Bald Eagle Nest Surveys							
4	Raptor Surveys												3/15						5/1	
													Raptor Surveys							
5	Western Prairie Fringed Orchid Surveys																		6/15	7/15
																			Western Prairie Fringed Orchid Surveys	
6	Dakota Skipper Surveys																		6/15	8/1
																			Dakota Skipper Surveys	

Keystone Pipeline Project
Biological Survey March-Chart 2007



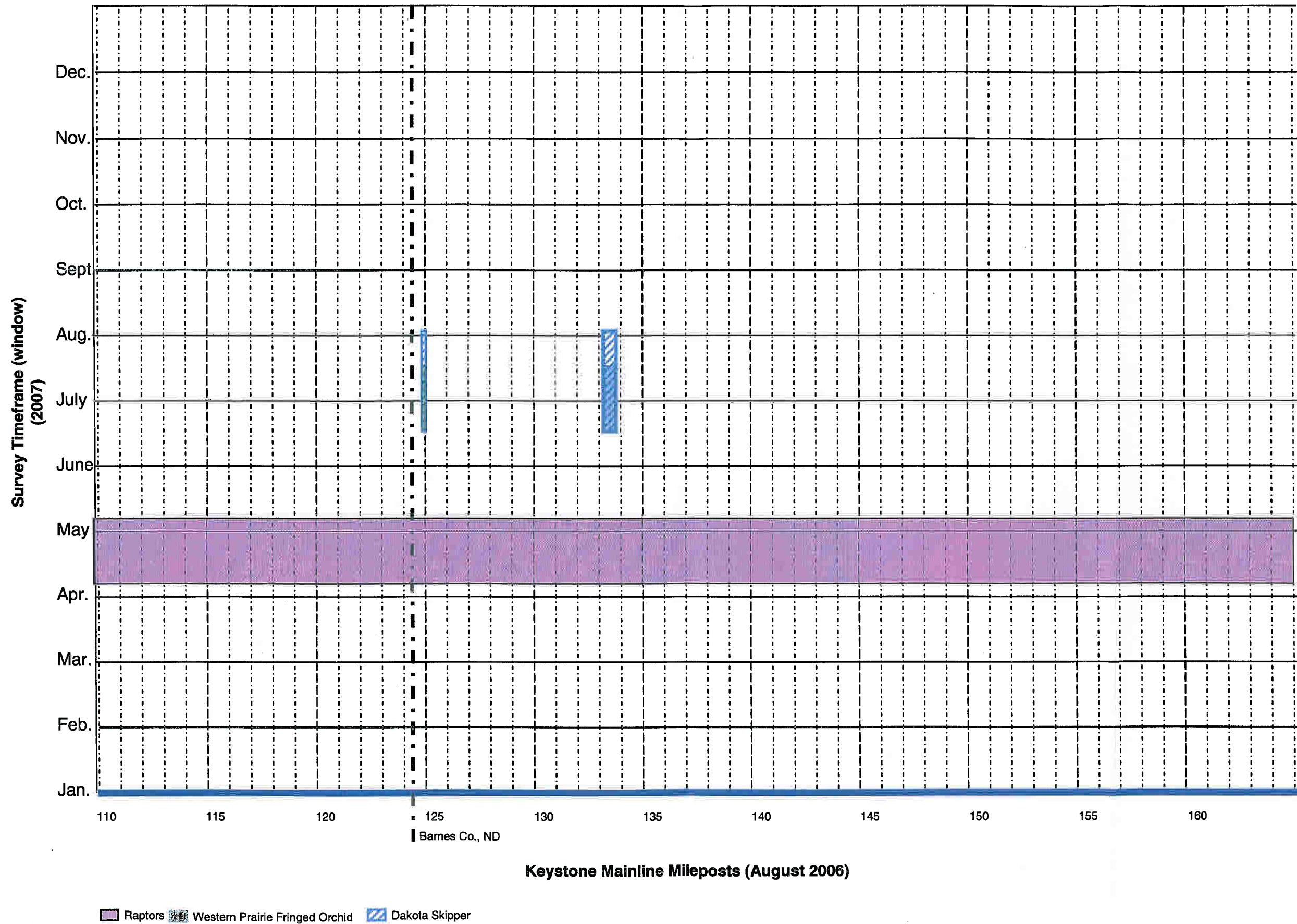
Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

Keystone Pipeline Project
Biological Survey March-Chart 2007



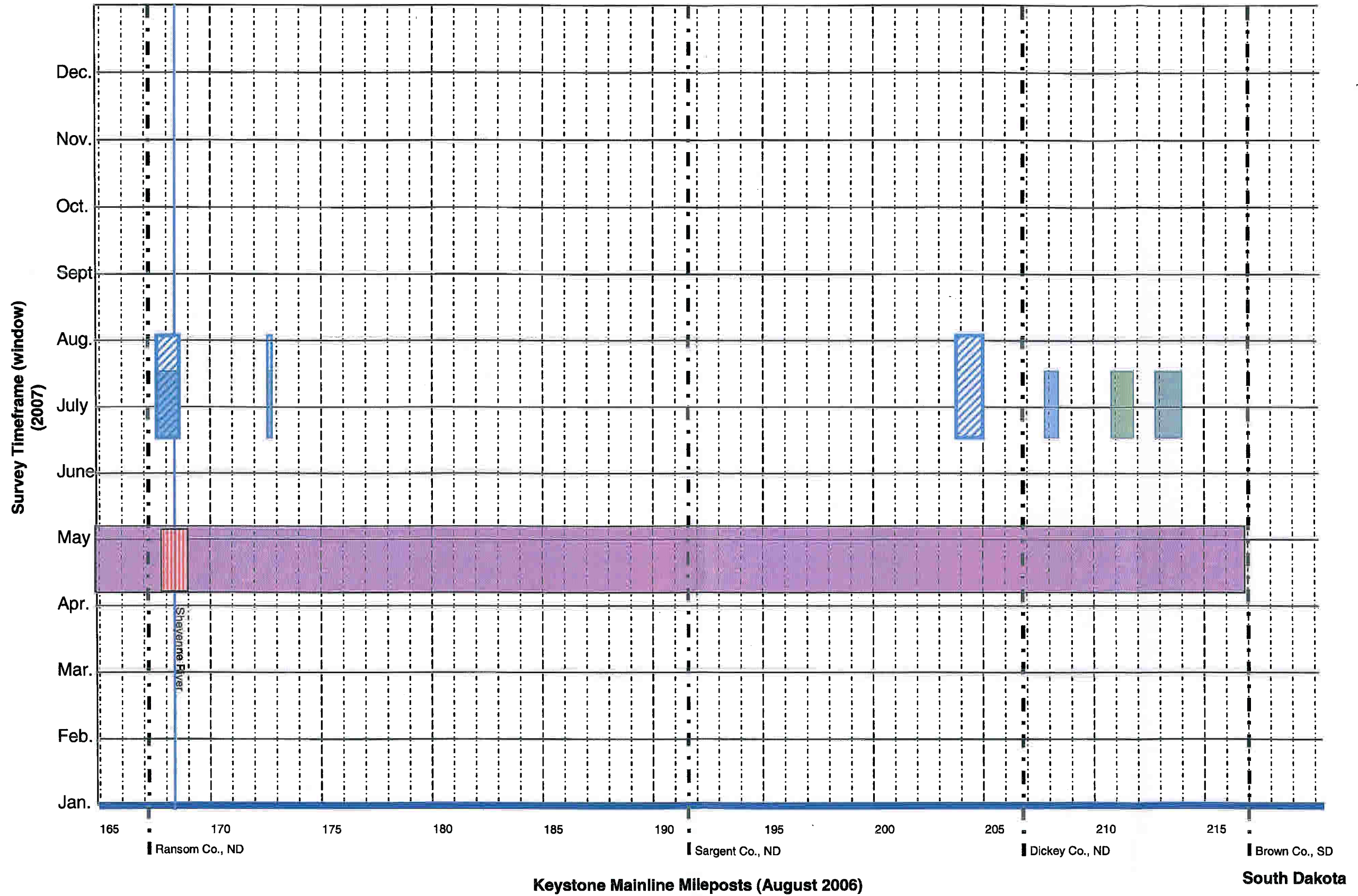
Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

Keystone Pipeline Project
Biological Survey March-Chart 2007



Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

Keystone Pipeline Project
Biological Survey March-Chart 2007



Bald Eagle (Nest Sites) Raptors Western Prairie Fringed Orchid Dakota Skipper

Note: Survey timeframe represents window biological surveys should be completed within, not the actual time it will take to complete surveys.

**Keystone Pipeline Project
Survey Protocols for North Dakota Special Status Species**

Species & Status	Survey Protocol
Bald Eagle <i>Haliaeetus leucocephalus</i> FT; ND-SC	<p>Survey Frequency: Aerial bald eagle surveys will be conducted for nest sites in 2007. Surveys may also be required prior to construction in 2008, if pipeline construction occurs during the breeding season (1-February through 15-August) or winter roosting season (1-November through 1-April).</p> <p>Procedures:</p> <ol style="list-style-type: none">1. The bald eagle surveys will be conducted along river corridors or historical bald eagle nest/winter roosting sites that occur within 1-mile from the project Right-of-Way (ROW). Stands of coniferous or deciduous trees will be surveyed for active nest sites during the breeding season2. Stands of coniferous or deciduous trees will be surveyed for active winter roost sites from 1 hour before sunrise or sunset to 1 hour after sunrise or sunset.3. A helicopter will be used for the surveys. Whenever possible, two observers will be used to conduct the surveys.4. Observations of individual eagles, nests, or roosting eagles will be recorded using Global Positioning Systems (GPS). The date, location, nest condition, activity status, nest condition, and habitat will be recorded for each sighting.5. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the NDGFD and the appropriate U.S. Fish and Wildlife Service (USFWS) field office.

**Keystone Pipeline Project
Survey Protocols for North Dakota Special Status Species**

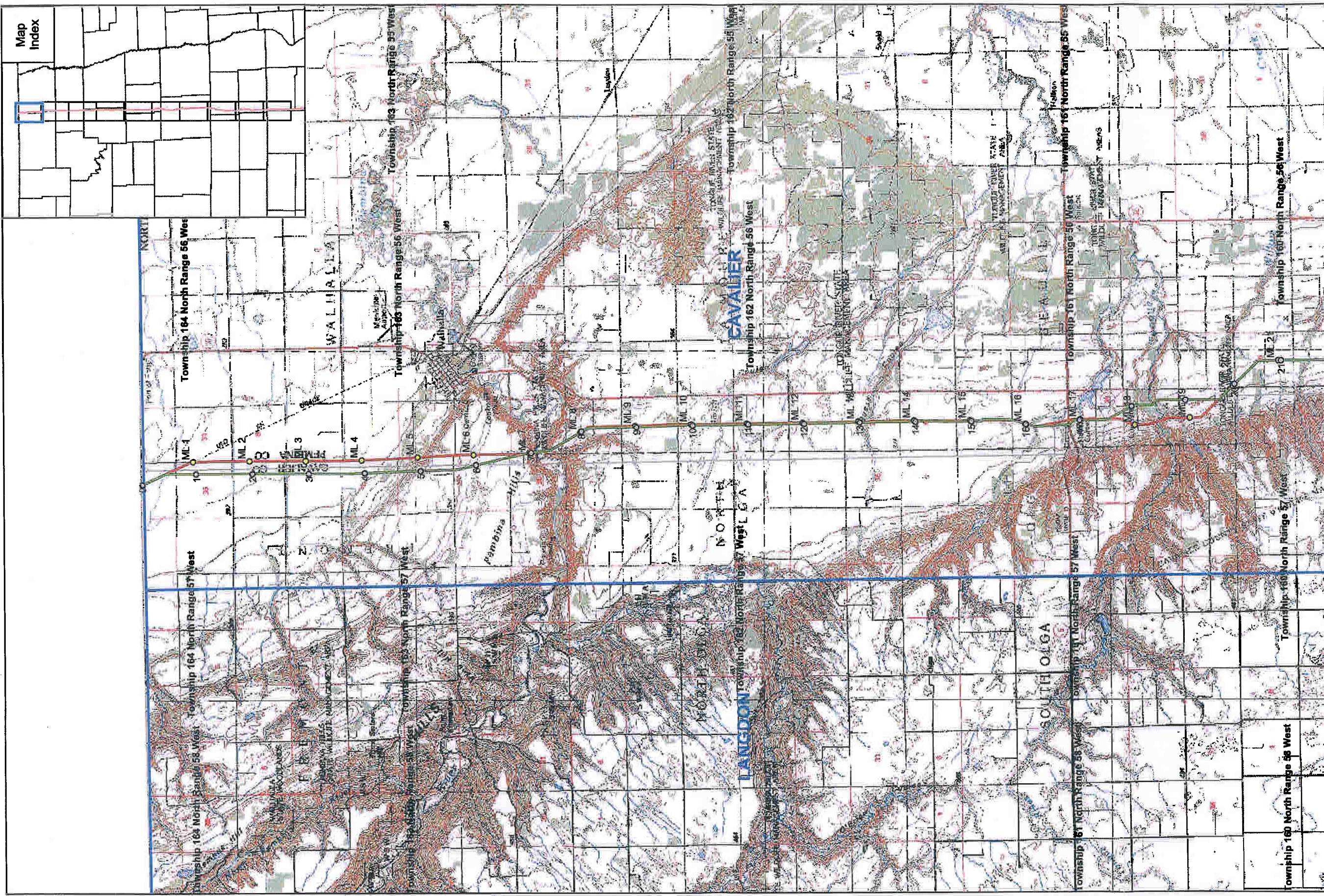
Species & Status	Survey Protocol
<p>Raptors</p>	<p>Survey Frequency: A raptor survey (aerial helicopter survey) was conducted within 0.25- to 0.50-mile from the edge of the construction ROW in April of 2006, to identify active and inactive nest sites along the project route. A raptor report was submitted to the USFWS in December 2006.</p> <p>A second raptor survey effort will be conducted prior to leaf-out in the spring of 2007. The focus of this survey is to identify nest sites that would be directly impacted from construction activities.</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. Raptor surveys will be conducted along the entire proposed project route, focusing on active and inactive nest sites that occur within the construction ROW. 2. A helicopter will be used for the raptor surveys. Whenever possible, two observers will be used to conduct the surveys. 3. Observations of raptors and nest sites will be recorded using GPS. The date, location, nest condition, activity status, raptor species, and habitat will be recorded for each sighting. 4. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the NDGFD and the appropriate USFWS field office.
<p>Dakota Skipper <i>Herperia dacotae</i> FC; ND-SC</p>	<p>Survey Frequency: Habitat surveys were conducted in the fall of 2006 to determine areas of potentially suitable native grassland habitat for this species.</p> <p>Surveys will be conducted in 2007 to determine if the species occurs within the ROW. 2008 pre-construction surveys would be conducted only in areas where this species was observed in 2007.</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. Surveys will occur in suitable habitat that was identified during the 2006 habitat surveys. 2. Surveys will occur within the construction ROW for the project. 3. The surveyor will have previous experience with Hesperineae, including sight identification and capture

**Keystone Pipeline Project
Survey Protocols for North Dakota Special Status Species**

Species & Status	Survey Protocol
	<p>experience (Endangered Species Permit Required)</p> <ol style="list-style-type: none"> 4. The surveyor will have experience with collecting and preparing voucher specimens of Lepidoptera 5. Surveys will be attempted within 2 weeks of detection of emergence because of the short flight period of the species. 6. Surveys will be completed between the hours of 1000 and 1800. 7. If cloud cover is 0-50%, surveys will not be conducted unless the minimum temperature is at least 75° F; if cloud cover is 50-80%, surveys will not be conducted unless the minimum temperature is at least 80° F; if cloud cover is greater than 80%, surveys will not be conducted. 8. Surveys will not be conducted when wind speeds are greater than 20 mph. 9. Observations of skippers will be recorded using GPS. Date, time, land use and/or habitat type, and weather conditions will be recorded for each area surveyed. 10. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the NDGFD and the appropriate Service field office.
<p>Western Prairie Fringed Orchid <i>Platanthera praeclara</i> FT; ND-SC</p>	<p>Survey Frequency: Habitat surveys were conducted in the fall of 2006 to determine areas of potentially suitable native grassland habitat for this species.</p> <p>Surveys will be conducted in 2007 to determine if the species occurs within the ROW. 2008 pre-construction surveys would be conducted only in areas where this species was observed in 2007.</p> <p>Procedures:</p> <ol style="list-style-type: none"> 1. Occurrence surveys will occur in areas of "good" habitat that was identified during the 2006 habitat surveys including: <ol style="list-style-type: none"> a. Low (wet) prairie dominated by bluestem grasses, wood lily, harebell, and smooth camas b. Upland (dry) prairie on ridges and hillsides dominated by bluestem grasses, needlegrass, pale purple and upright coneflowers and blanketflower. 2. Occurrence surveys will occur within the construction ROW for the project. 3. Surveys will be conducted during the flowering period (15-June through 15-July) by a qualified botanist

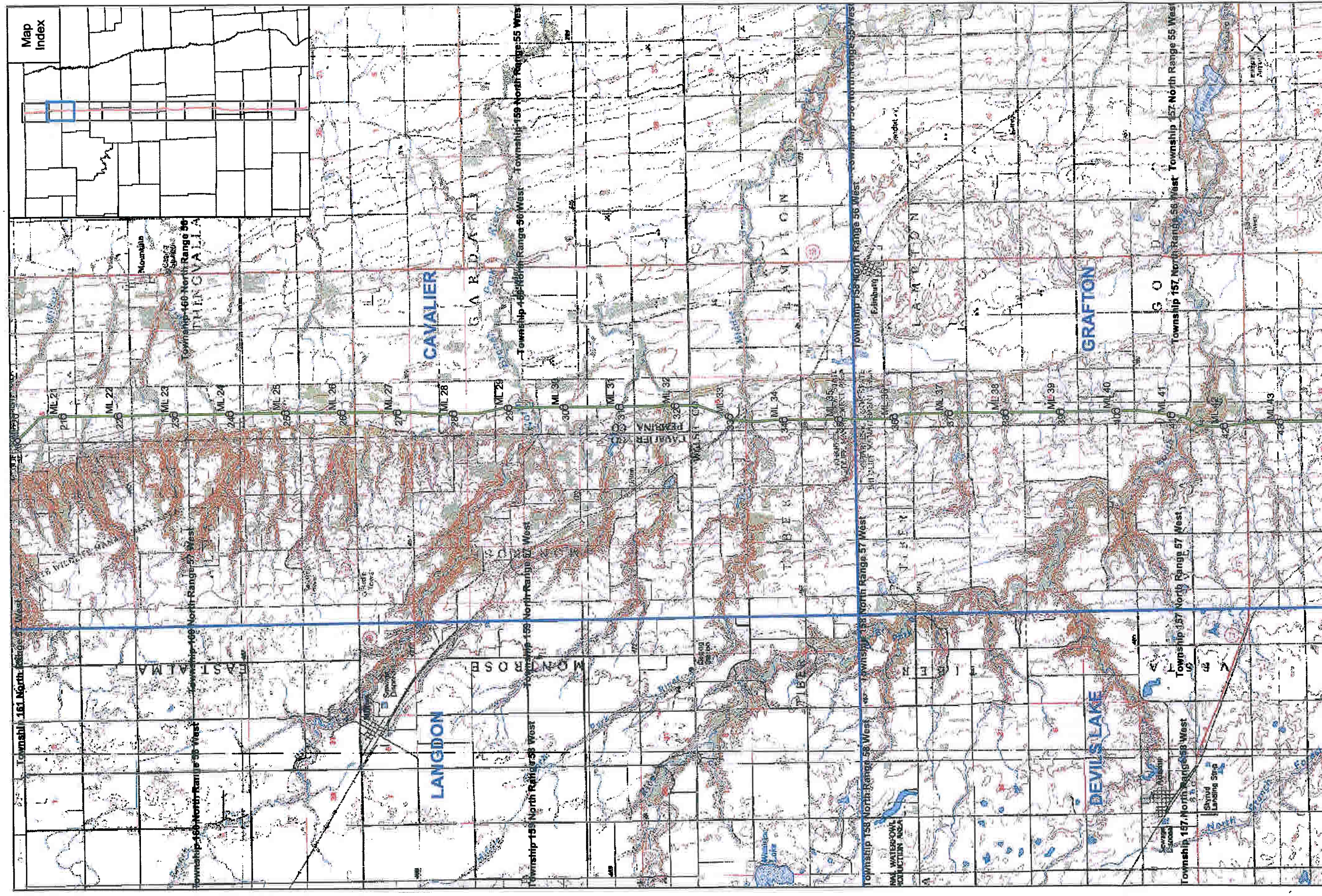
**Keystone Pipeline Project
Survey Protocols for North Dakota Special Status Species**

Species & Status	Survey Protocol
	<p>familiar with the species and trained to conduct rare plant surveys.</p> <ol style="list-style-type: none"> 4. Date, time, land use and/or habitat type, and number of orchids observed will be recorded for each sighting. Observations of orchids will be recorded using GPS. 5. Qualifications of the surveyor, method of survey, and results of the survey will be submitted to the NDGFD and the appropriate Service field office.
Migratory Birds	TBD



<p>Map Index</p>	<p>Map 1 of 10 General Project Location (North Dakota)</p>
<p>Keystone Pipeline Project</p>	<p>Pipeline (2/9/06) Pipeline (8/17/06)</p> <p>0 0.5 1 2 Miles</p>

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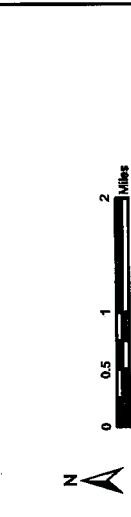


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Map 2 of 10
 General Project Location
 (North Dakota)

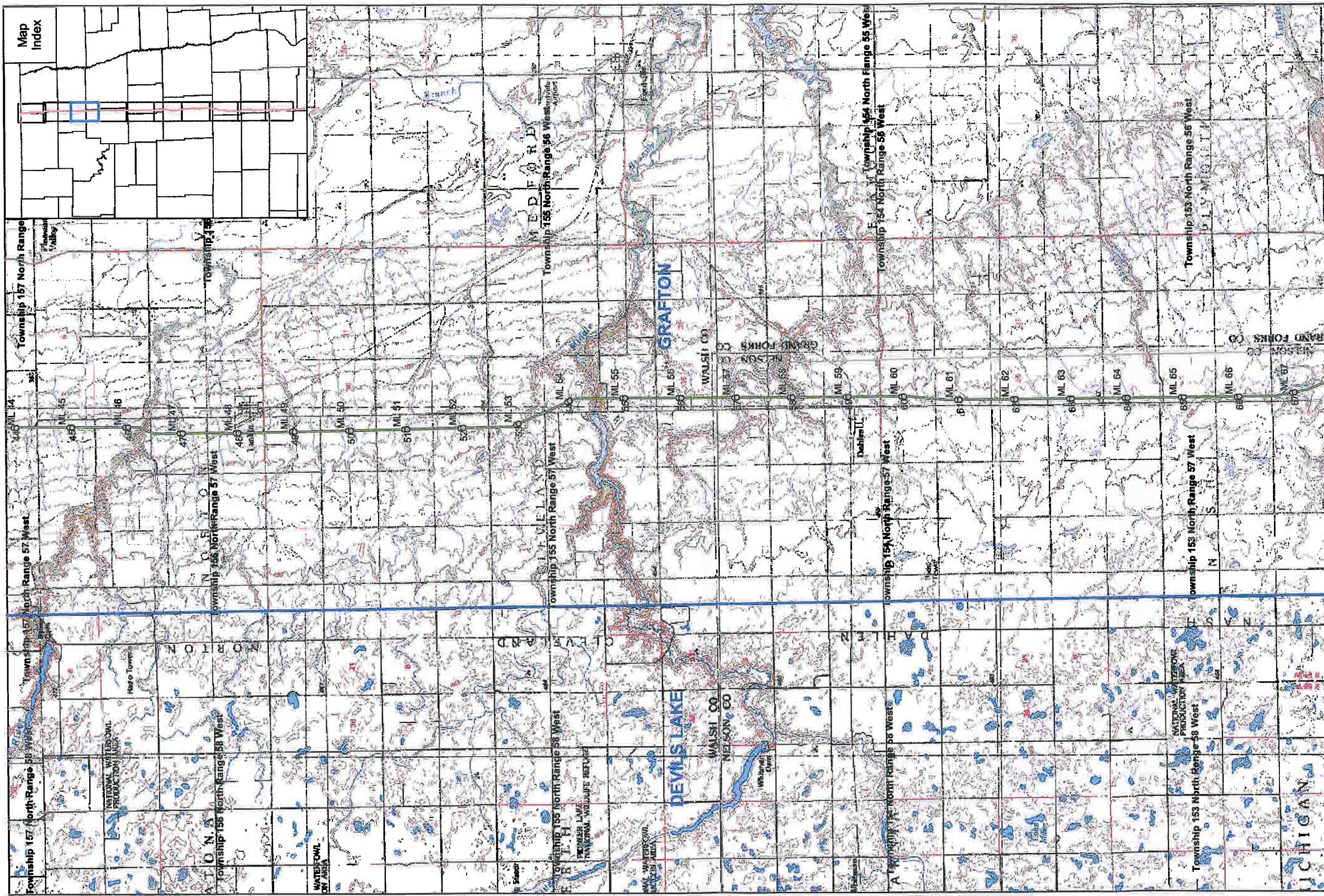
Keystone Pipeline Project

 by *business to deliver*



Pipeline (2/9/06)
 Pipeline (8/17/06)

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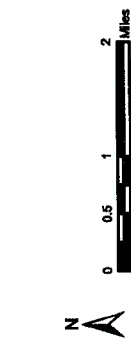


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Map 3 of 10
 General Project Location
 (North Dakota)

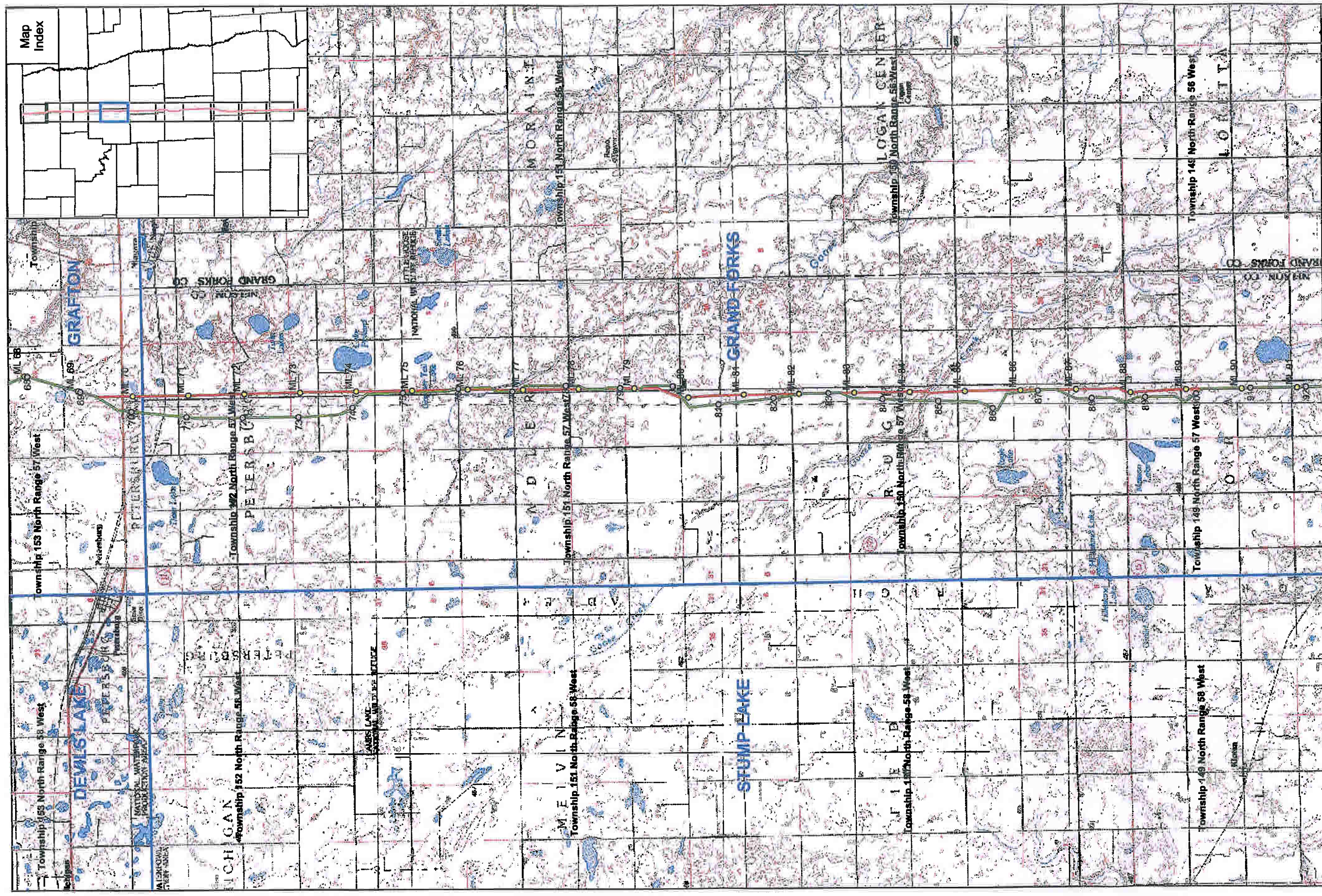
Keystone Pipeline Project

 In business to deliver





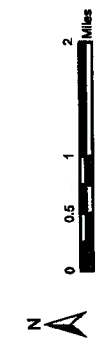
Pipeline (2/9/06)
 Pipeline (8/17/06)

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Map Index

-  Pipeline (2/9/06)
-  Pipeline (8/17/06)

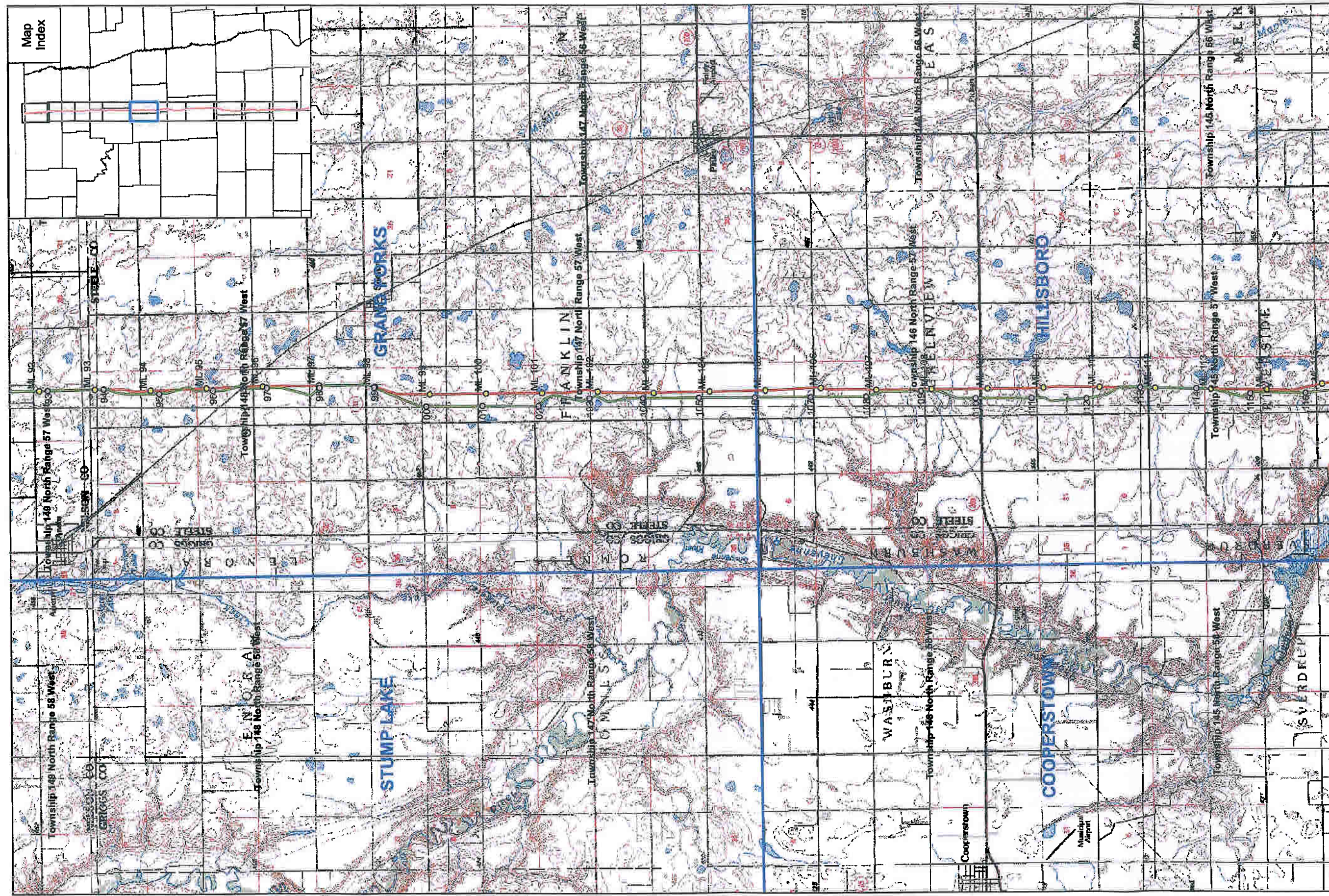


Keystone Pipeline Project



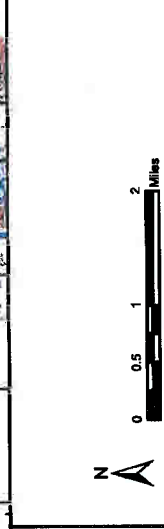
In Assessment to design



Map 4 of 10
General Project Location
(North Dakota)



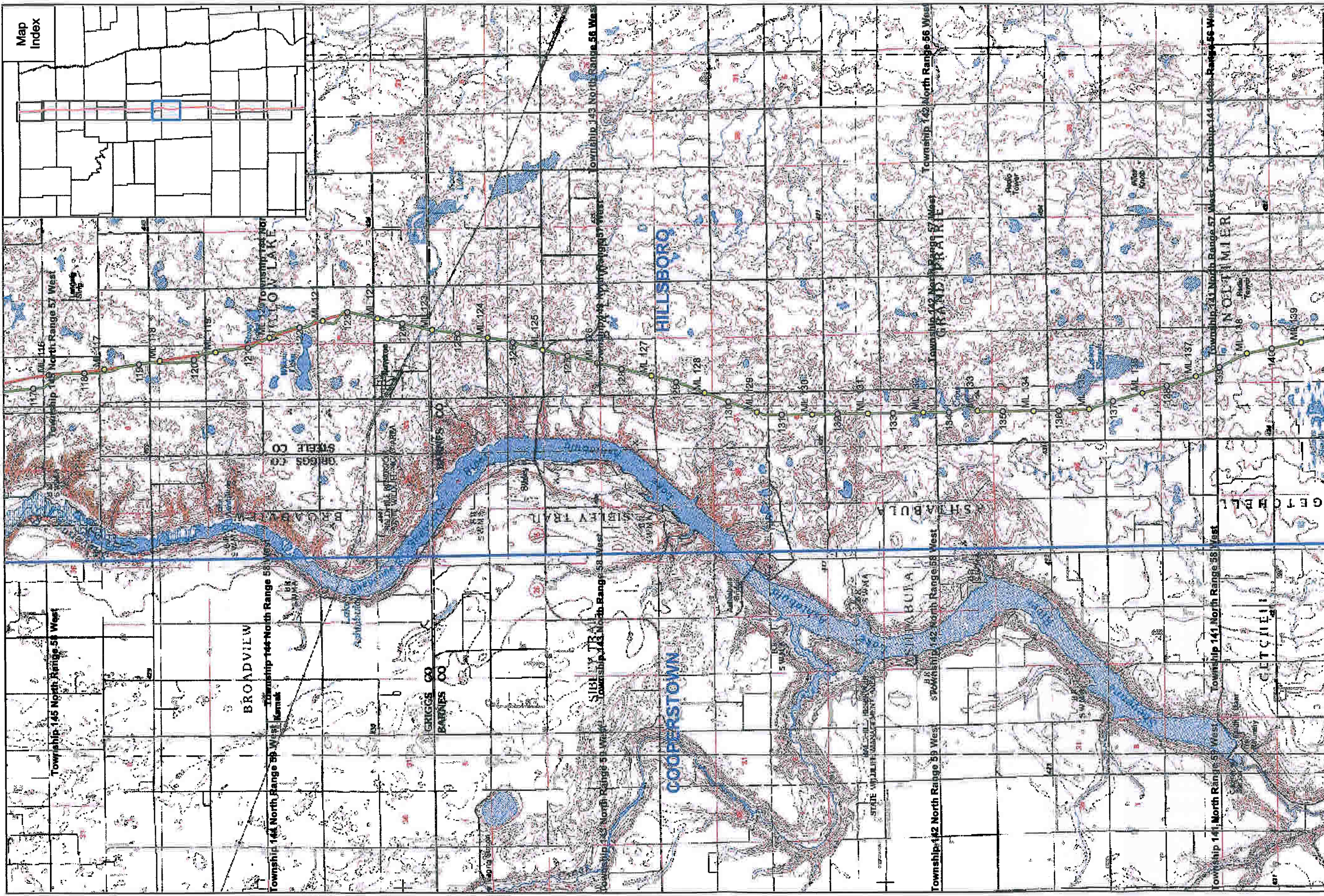
Map 5 of 10
 General Project Location
 (North Dakota)



Keystone Pipeline Project





 Pipeline (2/9/06)
 Pipeline (8/17/06)

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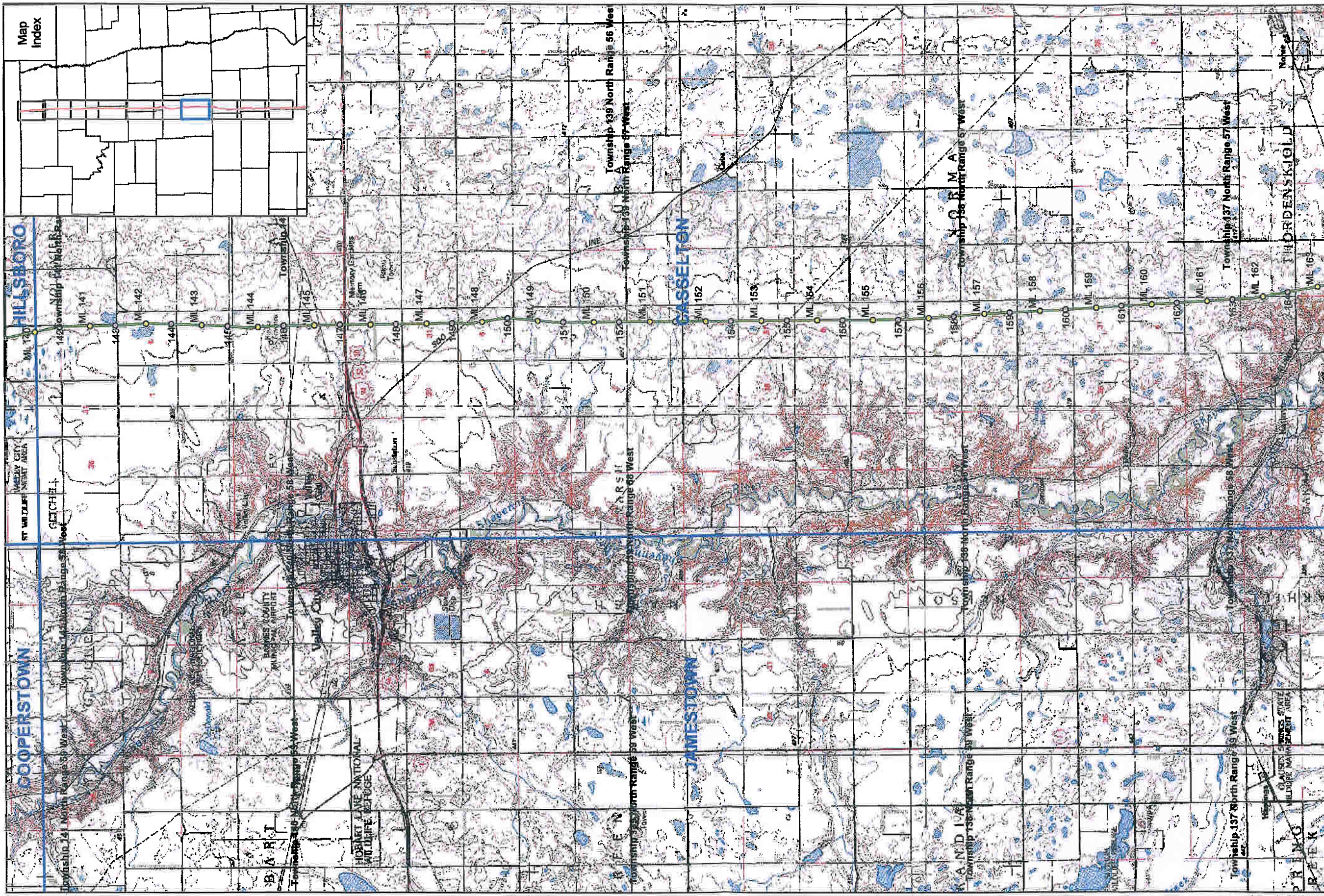
 Pipeline (2/9/06)
 Pipeline (8/17/06)

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 0 0.5 1 2 Miles

Keystone Pipeline Project

 In business to advance

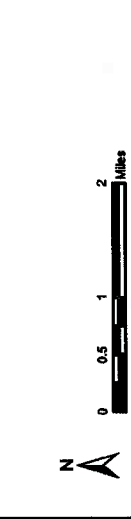
Map 6 of 10
 General Project Location
 (North Dakota)



Map 7 of 10
 General Project Location
 (North Dakota)

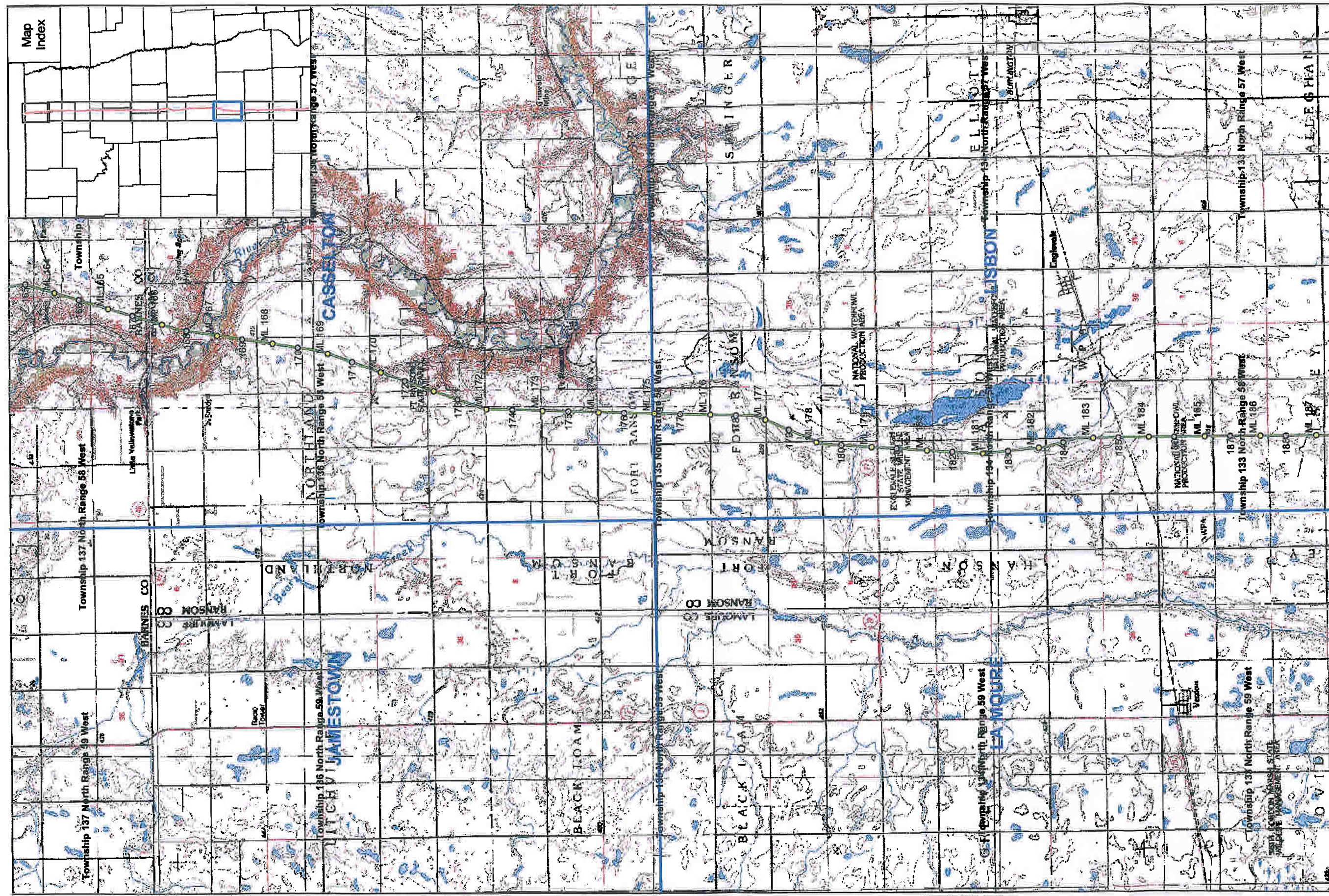
Keystone Pipeline Project

 In business to deliver

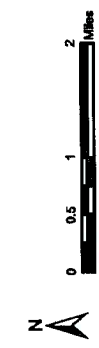
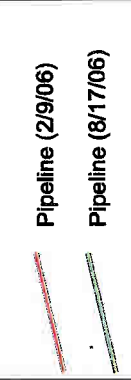


Pipeline (2/9/06)
 Pipeline (8/17/06)

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Map Index



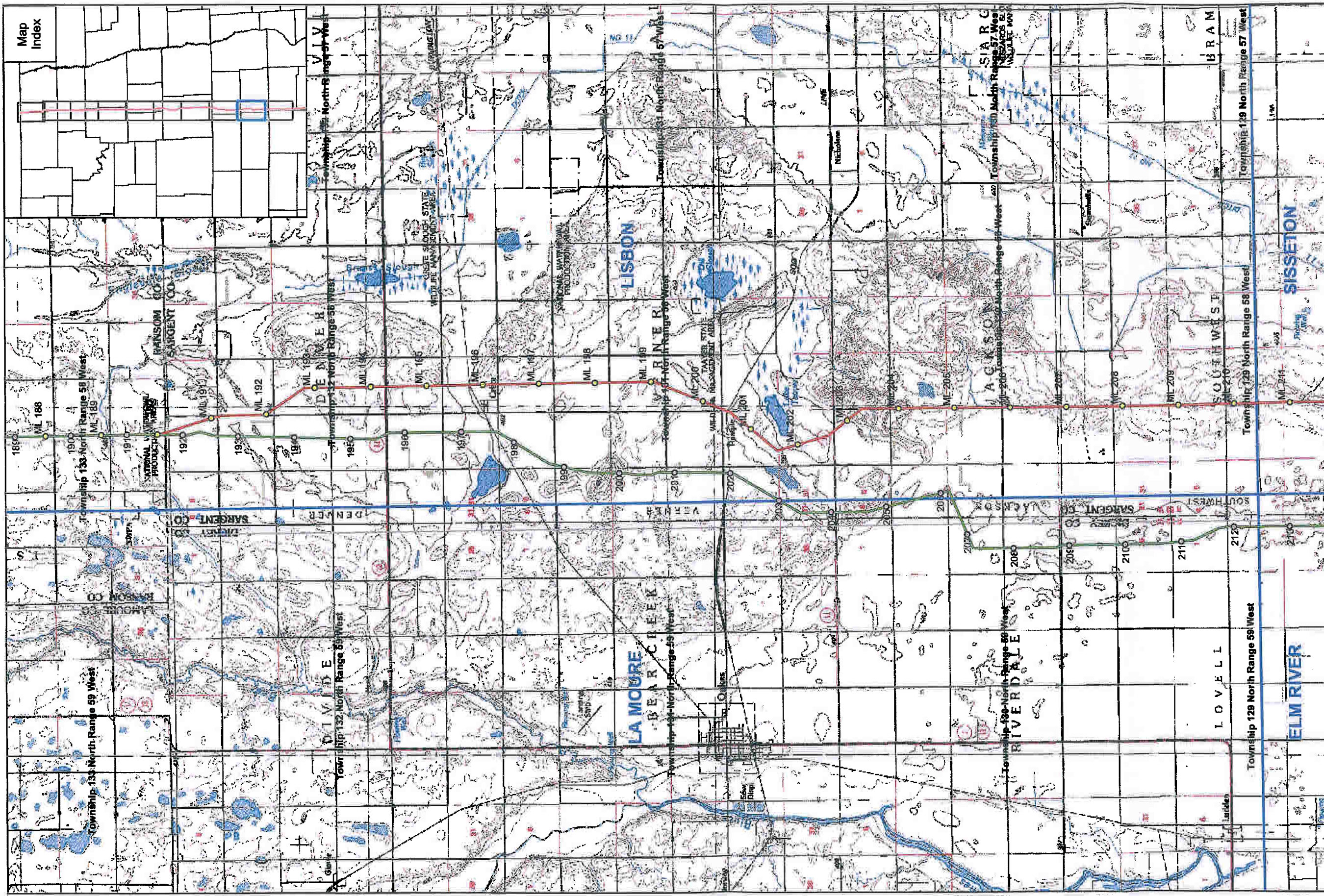
Keystone Pipeline Project

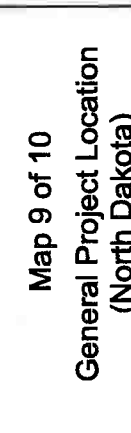

TransCanada

127 Access Road, Calgary, Alberta

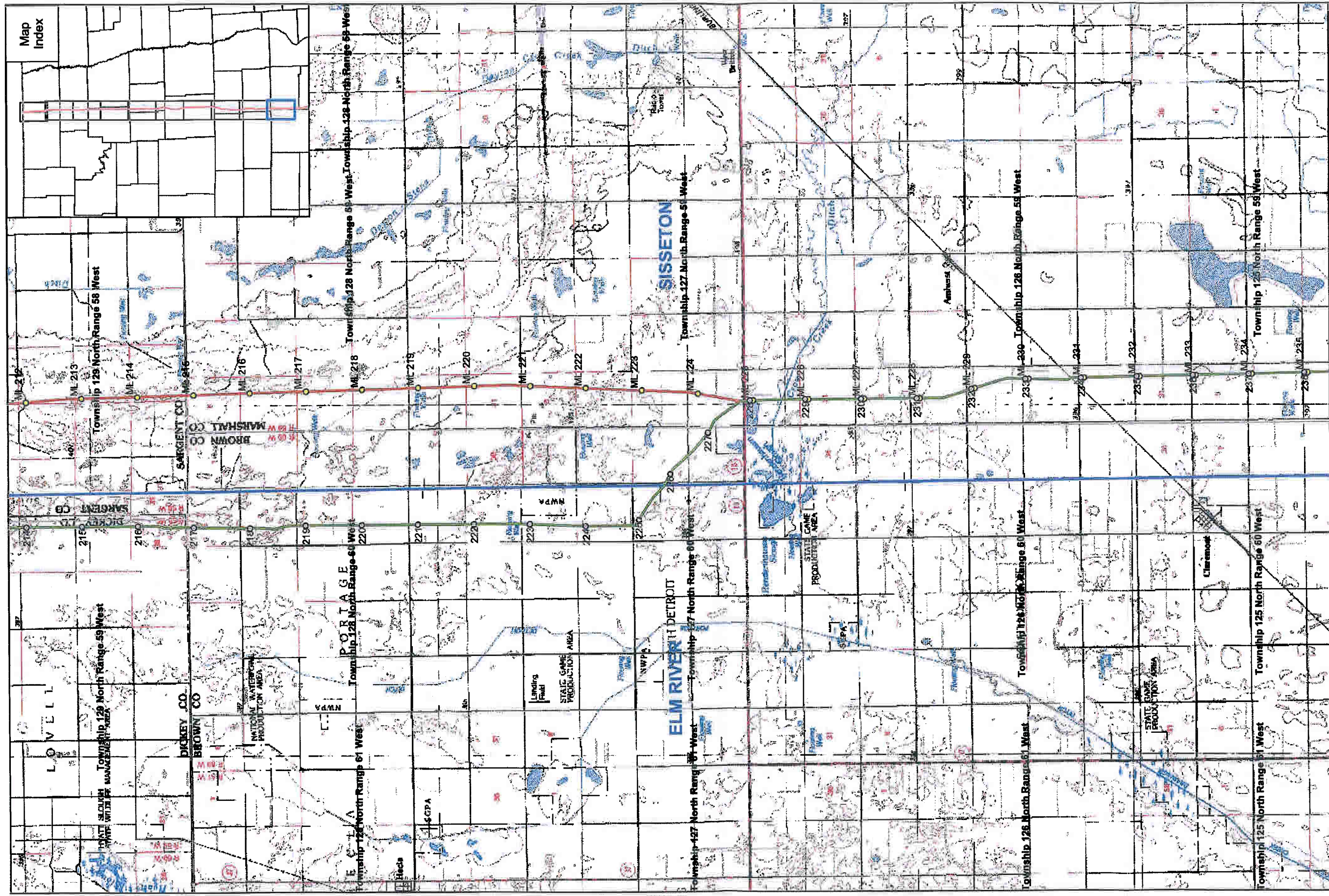
Map 8 of 10

General Project Location (North Dakota)




	<p>Keystone Pipeline Project</p> 	<p>Map 9 of 10</p> <p>General Project Location (North Dakota)</p>
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Map Index

 Pipeline (2/9/06)
 Pipeline (8/17/06)

N

 0 0.5 1 2 Miles

Keystone Pipeline Project

 An assistance to Calgary

Map 10 of 10
 General Project Location
 (North Dakota)